

## Research on Classified Cultivation and System Construction of Higher Vocational Enrollment Sources

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**Abstract:** In order to improve the quality of talent training, accelerate the pace of social and economic modernization, implement the major decision-making arrangements for stable employment and high-quality employment in the country, and promote the development of higher vocational education, the six departments including the Ministry of Education jointly issued the “Special Work Implementation Plan”, teaching staff [2019] No. 12 document, It directly promotes China's higher vocational education into the stage of universalization, and promotes the integration of vocational education and continuing education. However, in the face of a source environment with a large difference in comprehensive qualities composed of retired soldiers, laid-off unemployed people, migrant workers, new-type professional farmers, and serving personnel, How to find a suitable training path in higher vocational colleges, implement “teaching according to students’ aptitude”, achieve high-quality output of expanded enrollment sources, and contribute to social and economic construction is a problem that needs to be solved urgently.

### 1. Introduction

On March 05, 2019, Premier Li Keqiang proposed in the “Government Work Report” that “this year's large-scale vocational colleges will expand by 1 million people”; On April 04, 2019, Vice Premier Sun Chunlan emphasized at a national teleconference on deepening vocational education reform that in order to implement the important instructions and spirit of Premier Li Keqiang's “State Council Government Work Report 2019”, actively implemented the National Vocational Education Reform Implementation Plan, “After the expansion of higher vocational education, there will be great changes in the structure of students. There will be great differences in culture, skills, age, and social experience. It is necessary to provide diversified admission methods for the characteristics of different student sources. For secondary vocational students, ...; For retired soldiers, laid-off workers, and migrant workers, ...; for all types of skilled personnel, ... For these situations, we must make policy reserves, strengthen classified teaching and classified management, explore flexible learning hours and flexible schooling systems, prevent the decline in the enrollment rate and the quality of training after the expansion of enrollment, and fully release the positive effects of the enrollment expansion policy. [1]

At this stage, China's economic development is at a critical time for upgrading and transformation, and high-quality application-oriented talents that match it also need to upgrade and transform according to the characteristics of the times. Although higher vocational education provides part of the talent supply for socialist modernization, However, traditional employees, retired soldiers, laid-off workers, and migrant workers also urgently need career transformation to adapt to the new working environment. The policy background of 1 million higher vocational recruitment offers an opportunity for this. As a carrier for training talents, higher vocational schools should construct a complete talent training system in combination with the expansion of enrollment sources, classify them, teach them according to their aptitude, and ensure that talent training is of

high quality and can be implemented.

## **2. Orientation of Talent Cultivation for Higher Vocational Enrollment**

In July 2010, the National Medium- and Long-Term Education Reform and Development Planning Outline Working Group Office issued the National Medium- and Long-term Education Reform and Development Planning Outline (2010-2020), it provides a reference model for the orientation of talent training in higher vocational education. The development outline divides the national education system into eight sections: preschool education, compulsory education, high school education, vocational education, higher education, continuing education, ethnic education and special education. At the same time, the outline states that “vocational education is both a need for economic development and a need to promote social equity. In the entire education structure and education layout, vocational education must be placed in a more prominent and important position. This will help alleviate the current shortage of skilled and application-oriented talents, and it will also help rural labor transfer and expand social employment. “ Drawing on the guiding opinions in the development outline, China's higher vocational colleges should, based on their own school running characteristics and their role in regional economic development, reasonably locate and classify the sources of higher vocational expansion enrollment, and contribute to social and economic development.

### **2.1 Type Positioning**

The implementation of the large-scale vocational expansion policy in higher vocational education has promoted the vocational education to a stage of socialization and popularization. Therefore, the training of higher vocational colleges on the expansion of enrollment sources must be based on the needs of socio-economic development, accurately grasp the position of trained personnel in the social labor system, and clarify the type and classification of cultivation.

The orientation of talent cultivation for the expansion of enrollment sources should be mainly divided into two directions. First of all, the talents cultivated in higher vocational education are the application-type talents required by professional positions in social and economic development. The applied talents are different from theoretical and research talents cultivated by undergraduate colleges. Therefore, the positioning of the types of talent training in higher vocational colleges should be based on cultivating high-quality applied talents of technical skills. On the other hand, in the process of enrolling talents in the expansion of enrollment sources, job orientation should be used as the benchmark, and learners should be provided with a classified education model that meets the needs of professional development and personalized learning. Through the classification training, the learner's professional ability is improved, and the learner can complete the sustainable development of his career.

Finally, vocational education at higher vocational levels is not a panacea. Due to cultural, skills, age, and social experience restrictions in expanding the enrollment source, it is impossible for every learner to become a high-level technical and technical talent at the stage of higher vocational education. Therefore, there is uncertainty in the type of talents to be cultivated in higher vocational education.

### **2.2 Hierarchical Positioning**

The demand for talents in socio-economic development is multi-dimensional and comprehensive. It determines that the level of vocational education for talent training will not be the same. Therefore, higher vocational colleges should give full consideration to the actual factors of individual learners when carrying out talent training on the expansion of enrollment sources. On the basis of mastering professional basic knowledge, according to social production practices and technological development directions, guide students to find the correct level of professional positions, Complemented by individual choice of course study, the vocational positions are advanced to high-level positions, so that knowledge is transformed into an orderly social productivity.

To sum up, higher vocational colleges' talent cultivation orientation for expanding enrollment sources is different from the academic and theoretical talents cultivated by undergraduate colleges. Different from the front-line workers trained by social institutions and enterprises at the level, the talents it trains can meet the needs of socio-economic development; has a certain professional basic knowledge; has its own characteristics in professional positions; has strong practical operation ability, innovation ability, and can use the knowledge learned to solve practical questions.

### **3. Objectives of Classified Cultivation of Higher Vocational Enrollment Sources**

Talent training refers to the process of educating and training talents to achieve the set goals. In order to meet the needs of social and economic development, higher vocational colleges mainly train learners' knowledge, ability, and quality. The three support each other, and they are indispensable. Due to its unique characteristics, the expansion of enrollment sources is different from that of common high school graduates in terms of culture, skills, age, and experience. In the process of education, it is necessary to carry out classified training and individual counselling for the expansion of the enrollment source. The more balanced the training in the three aspects of knowledge, ability, and quality, the higher the quality of talents, and the more sustainable the graduates' career development. At the same time, the expansion of enrollment sources and fresh graduates have common characteristics, such as the final level of learning and the form of junior and senior high school education, which can be appropriately used in the education process.

#### **3.1 Knowledge Goal**

The achievement of knowledge goals should be achieved through the study of professional knowledge, cultural basic knowledge, and social practice knowledge, forming a knowledge system framework to serve the requirements of professional positions. The composition of the framework factors of the knowledge system for enrollment expansion is more complex, and the level of knowledge is uneven. Therefore, the cultural level test and technical skills test in the admission stage are indispensable. Higher vocational colleges need to evaluate the test results objectively, and then carry out classified training and personality counseling in combination with professional characteristics and teacher status to ensure talent cultivation.

In the process of classifying and enlarging the enrollment of students, the intelligence and ability of the learners must be considered, so carefully designed personalized learning content and classification and training models are very important. At the same time, the connection between courses and professional positions must be compact and practical. Therefore, knowledge learning must have “breadth” and “depth”.

#### **3.2 Ability Target**

Ability is a comprehensive individual with multiple traits. It is a characteristic behavior produced by an individual under the influence of different knowledge, skills and professional qualities. It reflects the characteristics of individual and the structure of ability and quality. The capacity structure of the expanded enrollment source should include three aspects: work ability, innovation ability and cooperation ability. Working ability means that after completing the vocational education stage, the expansion of enrollment sources can use knowledge and skills to solve actual job problems and have the ability to analyze dialectically. Working ability refers to the basic ability of expanding enrollment sources in social vocational positions; it is the core ability of own professional development, and it depends on the knowledge and ability framework structure provided at the stage of higher vocational education.

Innovative ability is the ability to change from a learner to a worker, using various skills and practical activities in the work phase, and innovating and summarizing the ability to innovate new thinking, new theories, new methods and new inventions with socioeconomic value. For example, in accordance with job requirements in professional positions, timely and accurate collection and processing of information, combining professional knowledge and work experience, the ability to create social value. In the socio-economic competition relationship, competition for talents and

resources is one aspect, but competition for innovation capabilities is more important.

Cooperative ability refers to the ability to coordinate and handle working relationships with others based on their own experience and social relationship structure after expanding enrollment sources working;

### **3.3 Quality Goals**

The quality goal refers to the educational result with the purpose of improving the quality of the learner; it is the process of improving the learner's education in psychology, culture, personality, thinking and professional spirit. In addition to the solid professional comprehensive qualities, learners should also have non-professional comprehensive qualities, such as professional ethics and sustainable development qualities. The quality goals are mostly reflected in “associating with people” and “handling things”, Knowledge and ability are the basic guarantees for survival in the social environment, and whether the life is happy and the development is sustainable depends on the individual's quality level. Quality training is a process of continuous learning and self-improvement. Therefore, quality-related cultural basic courses, general education courses, social practice courses, and elective courses at the vocational education stage are very important for the development of high-quality vocational students.

## **4. Construction of Classified Cultivation System for Higher Vocational Enrollment Sources**

According to the notice of the “Implementation Plan for Higher Vocational Enrollment Special Work Implementation” issued by the Ministry of Education and other six departments in May 2019. Document No. 12 of Faculty Position [2019]; “National Vocational Education Reform Implementation Plan” issued by the State Council in February 2019, content guidance of Guofa [2019] No. 4, Combining with the development of the popularization of higher vocational education in China and the requirements of vocational positions for talents demanded by the regional economy, higher vocational colleges should place the cultivation of qualified professionals who are urgently needed by society as an important place.[2] On the basis of training the knowledge target, ability target and quality target of higher vocational expansion enrollment source, it is necessary to construct a classification training system for higher vocational expansion enrollment source talents to ensure the quality of talent training.

### **4.1 Optimize the Training Plan for Classified Talents and Ensure the Quality of Talents**

#### **4.1.1 Formulation and Optimization of Professional Talent Training Programs**

The professional talent training plan is a programmatic document for talent training in higher vocational colleges, and it is the guarantee for achieving high-quality talent training. Because there are major differences in the expansion of admissions in terms of culture, skills, age, and social experience, each vocational college should separately develop a professional talent training plan that is suitable for the expansion of enrollment, taking into account the conditions of the enrollment, local economic development, and job requirements in order to avoid mismatches in talent training goals and student status and avoid situations where talent output is not in line with local economic development.

#### **4.1.2 Adjustment of Talent Training Structure**

Higher vocational colleges should clearly define the conditions and standards for the establishment of majors enrolled in the expansion of enrollment sources, in order to avoid poor teaching, bad specialty, and unfinished studies. At the same time, a mechanism for adjusting the structure of talent training and an adjustment mechanism for professional training objectives should be established to flexibly adjust and keep pace with the depth of the market.

Only by continuously strengthening professional construction, continuously optimizing the talent training structure, and condensing its own characteristics of running a school, can we form a win-win situation in which the quality of talent training is recognized by the society, graduates are not worried about employment, and vocational colleges are not worried about the source of

students.

## **4.2 Build and Optimize the Teaching Team, Improve the Running Level.**

At the current stage of higher vocational colleges, in addition to professional settings, curriculum systems, and academic hours, there are also many problems with the teaching staff in terms of teaching level and professional quality.

### **4.2.1 Number and Quality of Teachers**

In terms of quantity. The document [2004] No. 2 issued by the Ministry of Education in January 2004 stipulates that the ratio of teachers to students in higher vocational, comprehensive, normal, and ethnic colleges should not exceed 1:18. At the present stage, the ratio of teachers and students in some high-quality vocational colleges with long running time and high level of teachers is about 50: 1, 80: 1 or even 100: 1. This situation reflects that the number of faculty in higher vocational colleges is seriously insufficient at this stage, and the expansion of enrollment sources will further increase this proportion.[5]

In terms of quality. Data show that among the existing faculty in higher vocational colleges, the speed of self-renewal and ability improvement is severely disconnected from the development of the industry and cannot keep up with the pace of socio-economic development, especially in high-tech and high-tech professional fields.

### **4.2.2 Faculty Building Methods**

According to the “National Vocational Education Reform Implementation Plan” (20 regulations on vocational education) issued by the State Council on April 1, 2019, the guidance of Guofa [2019] No. 4 can be used to improve the teaching level of vocational colleges and universities. A number of reference opinions have been issued. Higher vocational colleges can start from the aspects of “industry-education integration”, “school-enterprise cooperation”, “proportion of dual-skilled teachers”, etc. At the same time, strengthen the training of existing full-time teachers, encourage young teachers to join the practice of enterprises, improve the treatment of part-time teachers in enterprises, promote the flow of enterprise experts and high-tech skills to schools, and take multiple measures to improve the number and quality of teachers.

Second, higher vocational colleges can implement the principle of “emphasizing skills, emphasizing teachers' morality, and neglecting academic qualifications” when recruiting new teachers. Teachers should preferably have certain work experience in the industry; It is best to have experts with core technologies in some industries to participate in higher vocational education and teaching, so that they can be used immediately, and they can be used as strong as possible, reducing or not recruiting fresh graduates, and avoiding the vacuum of talent quality training.

## **4.3 Construction of an Optimized Classification Training Course System to Achieve Multi-Channel Process Evaluation**

Higher vocational colleges should combine the positioning and specifications of talent training, scientifically and rigorously set the course credit module composition form, practical operation courses and form a frame system with clear levels, proportions and coordination.

### **4.3.1 Construction of the Curriculum System**

Although most of the expanded enrollment sources have relevant professional experience and already have some practical experience, they are better than ordinary freshmen in terms of practical operation. However, limited by the problems of insufficient professional knowledge and theoretical support and insufficient cultural upbringing, it is difficult to improve the skill level, and it is difficult to understand the causality of things. On the basis of professional curriculum education, higher vocational colleges can strengthen the basic cultural curriculum, general education curriculum, expansion education curriculum, skills competition exercise and innovation and entrepreneurship education to make up for it, thereby improving the comprehensive quality of enrollment expansion. At the same time, the department of the university can achieve the effect of

“joint construction and common evaluation” between the school and the enterprise through the participation of enterprises in the development of teaching materials, teaching plans, lecture notes, training manuals, curriculum standards and assessment standards.

#### **4.3.2 Rich Curriculum Resources**

The high-quality training standards for expanding enrollment sources must be based on high-quality courses and teaching management. The width, depth, and number of courses must be practical and targeted. In addition to general education courses, extension education courses and professional education courses, other specialty courses (optional), online courses, interest courses, school-enterprise connection courses, innovation and entrepreneurship courses, and social practice courses can be provided. Courses should be given credits, included in graduation assessment conditions, broaden the scope of knowledge, increase learning interest, and open the horizons of learners.

#### **4.3.3 Reform Teaching Methods and Assessment Methods**

Higher vocational colleges need to find breakthroughs in the cultivation of talents for enrollment expansion, optimize teaching methods, and focus on cultivating learners' ability to acquire knowledge and solve problems. Encourage and guide teachers to use the curriculum as a medium to enter enterprises and industries, conduct in-depth research, carry out curriculum reform based on the practicality of the curriculum, and promote the organic integration of teaching content, methods and effects. At the same time, we should also consider the actual situation of expanding the enrollment source. The theoretical knowledge can be appropriately reduced. Content learning and learning methods should be adopted to enable students with poor foundation and weak learning ability to master basic professional skills. In the course assessment and evaluation, the corresponding professional qualification certificate or practical operation project assessment is used instead of the evaluation method mainly based on mastering the theoretical knowledge assessment and quantifying the final exam scores.[6]

To sum up, higher vocational colleges should adopt the evaluation method of “ elastic admission, multiple forms of learning; strict exit, multiple ways to export “ to ensure the quality of talent training.

#### **4.4 Strengthening Practical Teaching to Achieve Vocational Job Matching**

Practical teaching is one of the most important educational contents of higher vocational education. It is a test of theoretical knowledge and a pre-warming up of vocational positions. The practical teaching link should be designed from the basic to the top, the theory to practice, and rationally design the loop teaching process, form a rational and integrated teaching method, and promote learners' ability to reasonably analyze, comprehensively judge, and solve problems independently.

##### **4.4.1 Strengthen the Design of Practical Teaching Links**

Practical teaching is the combination of theory with practice, a process by which learners solve practical problems, and an effective way to consolidate theoretical knowledge. First of all, since the expansion of enrollment sources already has relevant professional experience and has practical knowledge of the majors, higher vocational colleges should ensure the high-tech nature of the training equipment in terms of practical teaching conditions in order to meet learners' advanced demand for technical knowledge acquisition. Secondly, the practice teaching in the school should exist in a variety of forms, such as community activities, skill competitions, learner innovation and entrepreneurship projects, scientific research and invention and patents. Finally, the practice teaching environment outside the school can't be ignored either. We should choose companies that can represent the middle and higher level of the industry to carry out in-depth school-enterprise cooperation to ensure that learners are in line with the industry's advanced technology and graduates are employed.

In order to ensure a high-quality practical teaching environment, higher vocational colleges

should increase investment in practical teaching conditions, seek policy support, and issue practical teaching assessment standards, Encourage secondary schools, enterprises, and communities to cooperate in developing practical projects, guide students to actively participate, and implement complementary teaching models of internal and external practice projects to help students improve their comprehensive professional quality and have a correct outlook on life and values.

#### **4.4.2 Strengthen the Integration of Production and Education**

Only when schools and enterprises communicate with each other and help each other, and realize the integration of production and education, can they effectively cope with the differences in culture, skills, age, and social experience of the expanding enrollment sources; and can effectively enhance the strength of the enterprise. The specific methods are as follows: First, high-quality enterprises and social forces that represent the advanced level of the industry can be encouraged to develop in-depth school-enterprise cooperation with schools. In this way, it can not only meet the high level of practical skills required by the enrolled students, but also solve the problem of the expansion of the total number of students, teachers and teaching resources that cannot be matched in a short time and meet the standards on time. It can also effectively solve the gap in the professional counterparts' employment. Second, in accordance with the requirements of the “National Vocational Education Reform Implementation Plan” document issued by the State Council, to fully mobilize the enthusiasm of all parties to participate deeply in vocational education reform, In the construction of professional settings, talent training, curriculum system construction, school-enterprise cooperation textbook construction, education mode and assessment and evaluation, etc., the subjectivity in all aspects should be improved. Higher vocational colleges can also work with governments at all levels, enterprises, and social forces to build a number of production-education integration training bases that integrate diverse applications such as practical teaching, skill appraisal, social training, poverty alleviation, and qualification examinations. While satisfying the requirements of its own practical teaching and improving the level of joint education of school-enterprise cooperation, it can also serve the regional and local economic development and achieve a win-win situation of multilateral cooperation and multilateral cooperation.

#### **4.5 Credit Bank and Credit Conversion**

Affected by factors such as family, work, and social components of the expanded enrollment source, higher vocational colleges need to optimize and reform the student status management system, establish a credit bank and credit equivalent conversion method to achieve the transformation of learning results and credit accumulation to meet different needs Students have multiple channels, multiple standards, and graduated in different time periods. Specific implementation methods are:

##### **4.5.1 Credit Transfer and Flexible Academic System**

Higher vocational colleges should consider the actual situation of students. Courses can be set up in “half school year” units. If they cannot participate in the next learning stage, the existing learning results or credits can be counted into the credit bank to facilitate the connection of subsequent learning stages and achieve a flexible academic system. At the same time, the vocational qualification certificate, award certificate, and scientific research achievements obtained during the completed study stage can be converted into credits . The learning results will be quantified and counted into the credit bank until the graduation requirements are met. While not affecting the standards of elastic admission of the expansion of enrollment sources, higher vocational colleges have also tightened the quality of talent training to achieve stringent graduation.

#### 4.5.2 Credit Bank Connection

Governments at all levels should provide corresponding policy support, encourage different schools to collaborate with each other at the same level, jointly formulate talent training programs, open courses and evaluate evaluation standards, recognize learning results and credits, and achieve the docking of the “credit bank” to promote Each learner can combine his own characteristics without geographical restrictions and complete his studies in the same major in different schools. This not only eliminates the concerns of learners who are afraid of failing to complete their studies, but also allows them to combine their studies with their professions, and allays their worries.

#### 4.5.3 Flexible Design of Length of Schooling

Higher vocational colleges should reasonably design the class hours and school systems according to the actual situation of economic development in the society and the region.[3] The corresponding majors urgently needed in economic development can appropriately shorten the study time, As long as the learners meet the graduation conditions and meet the vocational skills standards, the school can issue graduation diplomas in advance, which not only fills the gap of talents in short service and socio-economic development, but also reduces the economic and time burden of the learners. It should be noted that higher vocational colleges need to formulate the corresponding standards and requirements for the shortest and longest education system, put an end to the phenomenon of supremacy of diplomas, beautification of academic qualifications, and poor academic performance, and promote the healthy development of vocational education.[4]

In short, in the context of expanding enrollment of 1 million in higher vocational education, in the initial year of implementing the National Vocational Education Reform Implementation Plan, Higher vocational colleges must find the advantages and characteristics of running their own schools, cooperate with all sectors of society, and meet the needs of local economic development. Higher vocational colleges must find the advantages and characteristics of running their own schools, cooperate with all sectors of society, and meet the needs of local economic development. Complete the classified cultivation and management of the expansion of enrollment sources, ensure the high-quality output and stable employment of the expansion of enrollment sources, and effectively implement the country's major decision-making arrangements.

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